Issue Brief – Debt Defeasance

NUMBER CFGO-08-06

SUMMARY

The State issues two main types of debt instruments: General Obligation (GO) bonds and State Building Ownership Authority (SBOA) revenue bonds. These bonds may be refunded at a lower interest rate or defeased with cash through an escrow account. Defeasance refers to the method of rendering outstanding bonds null and void. While in the strict sense, defeasance also refers to bond refunding, typically defeasance refers to using cash to set up an escrow account which will pay off the entire principal and interest on the bonds. When properly defeased, the State removes the bond from its books and has no further obligation towards that bond. In addition, some bonds have a call provision which allows the issuer (the State) to pay off the principal amounts before the maturity date.

This Brief also discusses another method of paying off bonds in which cash is set aside in an account that can earn higher interest rates than an escrow account. Caution should be used if such a method were employed so that the State is not required to comply with federal arbitrage regulations that limit the amount of earned interest. This method does not "defease" the bonds in the sense that the State would continue to carry the bonds on its accounting books.

Before pursuing defeasance options the State should consider the market environment and other State priorities for cash funding. If the Legislature determines to defease some of the State's debt, the 2004B and 2002A series of General Obligation Bonds are the best options based on call provisions and coupon rates.

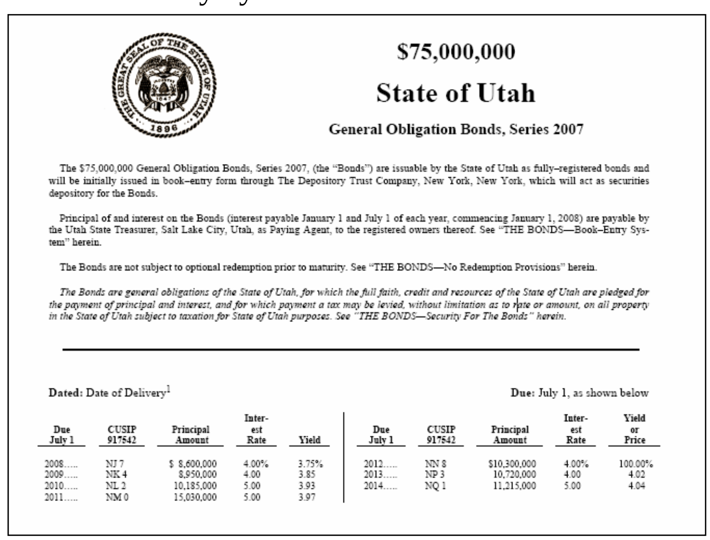
DISCUSSION AND ANALYSIS

Types of debt

The State issues two main types of debt instruments: General Obligation (GO) bonds and State Building Ownership Authority (SBOA) revenue bonds. General Obligation bonds are secured by the full "faith and credit" of the State and its ability to collect taxes. SBOA revenue bonds, used to construct buildings, are secured by: (1) a revenue stream of annually appropriated lease payments from agencies occupying those buildings and (2) a lien placed against the building cross-collateralized with other State owned buildings. GO bond debt is limited by the State Constitution and by statute whereas SBOA bond debt is limited only by statute.

Bond Structure

Unlike standard loans individuals may use, bonds are issued in numbered series by year. Whereas a typical loan is often a lump sum amount that an individual borrows that can be repaid at any time, each bond series has multiple principle amounts that mature in various years. The figure at right comes from the State's most recent bond offering statement for the 2007A Series of GO bonds. The table at the bottom of the figure illustrates how the $75 million of GO bonds is really seven different bonds whose principal amounts mature in different years.



$75,000,000

State of Utah

General Obligation Bonds, Series 2007

The $75,000,000 General Obligation Bonds, Series 2007, (the "Bonds") are issuable by the State of Utah as fully–registered bonds and will be initially issued in book–entry form through The Depository Trust Company, New York, New York, which will act as securities depository for the Bonds.

Principal of and interest on the Bonds (interest payable January 1 and July 1 of each year, commencing January 1, 2008) are payable by the Utah State Treasurer, Salt Lake City, Utah, as Paying Agent, to the registered owners thereof. See "THE BONDS—Book–Entry System" herein.

The Bonds are not subject to optional redemption prior to maturity. See "THE BONDS—No Redemption Provisions" herein.

The Bonds are general obligations of the State of Utah, for which the full faith, credit and resources of the State of Utah are pledged for the payment of principal and interest, and for which payment a tax may be levied, without limitation as to rate or amount, on all property in the State of Utah subject to taxation for State of Utah purposes. See "THE BONDS—Security For The Bonds" herein.

Dated: Date of Delivery[1] **Due:** July 1, as shown below

Due July 1	CUSIP 917542	Principal Amount	Interest Rate	Yield	Due July 1	CUSIP 917542	Principal Amount	Interest Rate	Yield or Price
2008.....	NJ 7	$ 8,600,000	4.00%	3.75%	2012.....	NN 8	$10,300,000	4.00%	100.00%
2009.....	NK 4	8,950,000	4.00	3.85	2013.....	NP 3	10,720,000	4.00	4.02
2010.....	NL 2	10,185,000	5.00	3.93	2014.....	NQ 1	11,215,000	5.00	4.04
2011.....	NM 0	15,030,000	5.00	3.97					

Call Provisions

Certain bonds are issued with a call provision which allows the issuer (the State) to redeem the bonds prior to maturity. While bonds without a call provision require the payment of all principal and interest until maturity, bonds with a call provision allow the issuer to pay off the remaining principal on the bonds at the call date. If bonds are redeemed at the call date, no additional interest payments are required of the issuer. The 2004B Series is the only GO bond debt with a call provision, though about half of the SBOA revenue bonds have a call provision. In most cases the call date (the date in which the State can pay off the bonds) is set about ten years from the date of issuance.

Defeasance

Defeasance refers to the method of rendering outstanding bonds null and void. Typically bond defeasance is both legal and financial - meaning that the debts are taken off of the accounting books and the State is no longer legally obligated to the debts. Unlike typical loans, bonds cannot simply be paid off at any time. As mentioned above, each bond series has multiple bond maturities and each of those maturities can be owned by many different entities which are guaranteed payment. Although bonds may be defeased, they remain outstanding to the bond holders. The bond indenture protects bond holder interests and requires the issuer to pay the principal and interest as outlined in the bond offering documents through the call date or maturity. Bond holders are entitled to *all* the principal *and* interest guaranteed by the bond offering through the call date or maturity as stipulated in the legal documents. Thus, the State cannot simply pay off the principal amounts of the bonds and be debt free – the State must pay both the principal and interest through the respective call date or maturity.

Outstanding Debt

Outstanding GO Bond Indebtedness

Series	Purpose	Original Amount	Final Maturity Date	Outstanding as of Jan. 4, 2008
1998A	Highways	$265,000,000	July 1, 2008	$18,725,000
2001B*	Highways	$348,000,000	July 1, 2009	$73,775,000
2002A*	Various	$281,200,000	July 1, 2011	$23,600,000
2002B	Refunding	$253,100,000	July 1, 2012	$250,580,000
2003A*	Various	$407,405,000	July 1, 2013	$293,425,000
2004A	Refunding	$314,775,000	July 1, 2016	$314,775,000
2004B	Various	$140,635,000	July 1, 2019	$111,630,000
2007A	Various	$75,000,000	July 1, 2014	$75,000,000
Subtotal		$2,085,115,000		$1,161,510,000
Plus Unamortized Original Issue Bond Premiums				$56,872,600
Less Deferred Amount on Refunding				($14,467,100)
Total GO Debt				$1,203,915,500

*Portions refunded in subsequent bond issues

Outstanding Revenue Bond Indebtedness

Series	Original Amount	Final Maturity Date	Recently Defeased	Outstanding as of Jan 4, 2008
1992AB Series	$27,580,000	August 15, 2011		$8,460,000
1993A Series	6,230,000	January 1, 2013		2,235,000
1997A Series	4,150,000	May 15, 2008		195,000
1998A Series	25,710,000	May 15, 2008		775,000
1998C Series	105,100,000	May 15, 2019	4,515,000	95,110,000
1999A Series	9,455,000	May 15, 2009		785,000
2001A Series	69,850,000	May 15, 2021	56,200,000	5,350,000
2001B Series	25,780,000	May 15, 2024		22,660,000
2001C Series	30,300,000	May 15, 2022	30,300,000	0
2003 Series	22,725,000	May 15, 2025		20,305,000
2004A Series	45,805,000	May 15, 2027		44,110,000
2004B Series	8,920,000	May 15, 2013	8,525,000	0
2006A Series	8,355,000	May 15, 2027		8,355,000
2007A Series	15,380,000	May 15, 2028		15,380,000
Subtotal	$405,340,000		$99,540,000	$223,720,000
Plus Unamortized Premiums				$2,893,000
Less Deferred Amount on Refunding				($1,301,400)
Total SBOA Debt				$225,311,600

Bond Refunding

Bond refunding refers to the practice of using the proceeds from the issuance of new, lower interest rate bonds to set up an escrow account to pay the principal and interest on old, higher interest rate bonds until maturity. If done properly, the State is able to take the old bonds off of its accounting books and can consider the old bonds legally defeased (though the new bonds take the place of the old bonds on the accounting books). Bond refunding typically occurs when current interest rates are low and the fixed interest rates on outstanding bonds are high. When this is the case, the issuer (the State) is able to refinance its debt at a lower rate and recoup the savings through lower annual debt service payments. As shown in the Outstanding GO Bond Indebtedness table above, the State has refunded several General Obligation bonds.

Cash Defeasance by Escrow Account

Whereas refunding simply refinances bonds at a lower rate, there is an option to actually take the debt completely off of the books. That option is to set up an escrow account with cash that will be sufficient to pay all of the principal and interest on the bonds until they are callable or mature. Federal law limits the types of investment options for such an escrow account to US Treasury Obligations or State and Local Government Series (SLGS) investments which have low interest rates, but are very secure. The escrow account is allowed to accrue interest off of those investments to offset the some of the principal and interest payments, though federal arbitrage regulations limit the amount of interest that may be earned.

The benefit to using an escrow account to defease bonds is that the State can completely take the debt off its books and not have any future obligations toward the bonds. The cost to the State of using this option is the higher interest earnings the State could otherwise receive by investing the cash in securities other than SLGS or Treasury Obligations and the opportunity cost of using the cash to fund other State priorities.

Arbitrage Calculations

Arbitrage is the profit the State earns by investing the proceeds of its tax-free bonds in securities that have higher yields. State (and local) bonds have low interest rates compared to the private sector because they are exempt from state and federal tax. Due to this benefit, the federal government limits the amount of arbitrage that states and local governments can receive on their bonds to a certain percent (yield) unique to each bond issuance. Any amount the State earns above this arbitrage yield rate is required to be remitted to the Federal Government.

When using an escrow account to defease bonds, the State may earn up to the arbitrage yield rate on the interest it receives from the investment earnings. If it earns more (positive arbitrage) the State must rebate that amount to the federal government. If the State earns less (negative arbitrage) the State has failed to take advantage of potential earnings allowed by federal law.

In the current market environment, SLGS and Treasury Obligation interest rates are lower than the arbitrage yield rates on the State's bonds. Therefore, if the State elects to use an escrow account to defease its bonds, the State will have negative arbitrage on its earnings – meaning the State will still collect interest earnings, but not as much as it could otherwise have collected under federal law.

For instance, if the State decided to pay off the 1998C SBOA revenue bonds which have the State's highest coupon (interest) rate of 5.50%, the State could expect to receive a yield of 3.50% on the SLGS (as of 1/3/08). The arbitrage calculation on these bonds is 4.79% or 1.28% above the SLGS return which creates a $5.06 million negative arbitrage. The State still would make $16.3 million in interest off of the SLGS investment, but it could have made up to $21.37 million if investment rates were higher.

1998C Bonds (Non-ABC)	Amount	Rate
Principal Outsanding	81,100,000	
Interest Outstanding	25,664,650	5.50%
Total Debt Outstanding	106,764,650	
SLGS Escrow Interest (1/3/08)	16,311,257	3.50%
Amount needed for Refunding	90,453,393	
	106,764,650	
Arbitrage Calculation	21,369,016	4.79%
Amount needed for Refunding	85,395,634	
	106,764,650	
Negative Arbitrage	(5,057,759)	

Cash Defeasance without an Escrow

Another option exists that would allow the State to financially pay off the bonds, though legally the bonds would stay on the books until they mature. This option is for the state to put aside sufficient cash to be invested at rates higher than the federally restricted arbitrage yield. As long as the State avoids mentioning that these funds will be used specifically for debt service, the State may earn higher than arbitrage rates on the money and may use those earnings to pay off the bonds. Any mention of the intent of these funds, however, to pay debt service on bonds may be construed by the federal government as requiring the State to abide by arbitrage regulations. The risk of this option is that the market rates will decline to a level below the arbitrage yield and that interest earnings will not be sufficient to cover all of the principal and interest payments.

Other Considerations

When considering bond defeasance there are two considerations that the state should also take into account – the current market environment and inflationary costs of construction.

The economy has surged ahead in the last three years after a downturn in the early 2000s, however, interest rates appear fairly volatile. The Public Treasure's Investment Fund (PTIF) is a good indication of the return on secure investment options the State currently invests in. In 2007 the PTIF had an investment return of 5.3 percent; though the projection for 2008 is estimated at approximately 4.5 percent and possibly even lower, depending on

Federal Reserve Board actions. Therefore, the State is likely to receive low interest rates on any cash defeasance investments. The best time to cash defease bonds would be at a time when interest rates are high.

The second consideration is the cost of construction. The State typically bonds for buildings and highways, both of which have seen double-digit inflation costs over the last several years. The costs of steel and concrete, which are the primary components of buildings and highways, have increased dramatically over the last several years due to demand from China and other global economic conditions. Oil, which is used in asphalt for highways, has also seen significant price inflation over the last several years. The cost of using cash to defease bonds includes the opportunity cost of using those funds to build roads and/or buildings that have inflation rates of double or triple the interest rates on the bonds.

Which Bonds Should be Paid Off First?

- *High Coupon Bonds.* Typically, bonds with the highest interest rates are the most likely candidates for defeasance. The higher the coupon rate on the bonds, the more the State will pay in interest costs over the life of the bonds.
- *Bonds with Call Provisions.* As noted above, call provisions enable the State to pay off bonds early without having to pay the associated interest payments to maturity (as you would in an escrow). Assuming the coupon rates on the bonds with a call provision are not substantially lower than other bonds, the callable bonds would probably be defeased at a lower cost.

GO Bond Defeasance Candidates by Coupon Rate and Maturity

Bond Series	Maturity Date	Principal	Coupon Rate	Call Provision	Project Type
2004B	7/1/2019	$5,025,000	5.000%	7/1/2014	Hwy
2004B	7/1/2018	$4,800,000	5.000%	7/1/2014	Hwy
2004B	7/1/2017	$4,550,000	5.000%	7/1/2014	Hwy
2004B	7/1/2016	$4,350,000	5.000%	7/1/2014	Hwy
2004B	7/1/2015	$4,125,000	5.000%	7/1/2014	Hwy
2002B	7/1/2012	$59,915,000	5.375%	Cash Defeasance	Hwy
2002B	7/1/2011	$56,705,000	5.375%	Cash Defeasance	Hwy
2002B	7/1/2010	$53,670,000	5.375%	Cash Defeasance	Hwy
2002B	7/1/2009	$30,835,000	5.375%	Cash Defeasance	Hwy
2002A	7/1/2011	$6,325,000	5.250%	Cash Defeasance	Hwy

- *General Obligation Bonds.* Of the two types of debt instruments the State currently uses, General Obligation Bonds are the more likely candidates for defeasance. SBOA revenue bonds, for the most part, are paid for through dedicated revenue streams whereas GO bonds are paid with appropriations of state funds. GO bonds also count against the State's constitutional debt limit whereas SBOA bond do not.

CONCLUSION

Any bond may be defeased with cash whether or not it has a call provision. Cash may also be placed in a separate account to earn higher interest which helps pay the debt service on the bonds. This option, however, does not legally defease the bonds and bears some market risk. Before pursuing any defeasance option, the State should consider the market environment and other State priorities for cash funding. If the Legislature determines to defease some of the State's debt, the 2004B and 2002A series of General Obligation bonds are the best options based on call provisions and coupon rates. The 1998C series of SBOA revenue bonds is the best defeasance option for the revenue bonds, though the Analyst recommends that General Obligation bonds be defeased first.